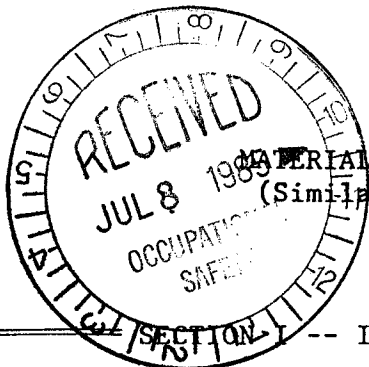


THE
HARSHAW
CHEMICAL
COMPANY

H-33-82R-WP



HAZARD MATERIAL SAFETY DATA SHEET
(Similar to OSHA Form 20)

6/83
DPM 950-40
CODE: 418-002-03

PRODUCT NAME
Ammonium Bifluoride

DATE: 04/21/83

SECTION I -- IDENTIFICATION

SUPPLIER'S NAME The Harshaw Chemical Company

EMERGENCY TELEPHONE 216/721-8300

ADDRESS 1945 East 97th Street
Cleveland, Ohio 44106

CHEMICAL NAME Ammonium Bifluoride

CAS No. 1341-49-7

U.N. No. UN1727

FORMULA NH_4FHF

D.O.T. CLASSIFICATION Corrosive Material

SECTION II -- HAZARDOUS INGREDIENTS OF MIXTURES

Material or Component	%	Threshold Limit Value
Not applicable		

SECTION III -- PHYSICAL DATA

BOILING POINT 239.5°C

MELTING POINT 126.2°C

SPECIFIC GRAVITY ($\text{H}_2\text{O}=1$) 1.503

VAPOR PRESSURE Not applicable

VAPOR DENSITY (Air=1) Not applicable

SOLUBILITY IN H_2O (% by Wt.) 58.3g/100g water

% VOLATILES BY VOLUME Not applicable

EVAPORATION RATE (Butyl Acetate=1)
Not applicable

APPEARANCE AND ODOR White, translucent flake; odorless

SECTION IV -- FIRE AND EXPLOSION DATA

Not a fire or explosion hazard, but may release toxic emissions if involved in a fire. Wear self-contained breathing apparatus.

SECTION V -- HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

2.5 mg/m^3 as F (ACGIH, 1982)

EFFECTS OF OVEREXPOSURE

Eye contact causes burns.

Skin contact causes severe irritation and fluoride-like burns which may not be immediately evident.

Inhalation causes severe irritation to upper respiratory tract.

Ingestion is harmful.

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Immediately flush with plenty of water for at least 30 minutes; do not use Zephiran Chloride solutions on eyes; call a physician.

Skin: Immediately flush with cold water for at least 15 minutes. Use alkaline soap if available. If irritation occurs, immerse and soak affected area in 0.13%(1:750) iced, aqueous Zephiran Chloride solution for 30-60 minutes (saturated compresses can be used if area can't be immersed) and call a physician.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Call a physician.

Antidote: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

SECTION VI -- REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY Decomposition above 350°C (boils at 239.5°C)

INCOMPATIBILITY Strong acids, strong alkali

HAZARDOUS DECOMPOSITION PRODUCTS Heat above 350°C will result in decomposition releasing HF and NH₃. If contacted with strong acids, HF will be released. If contacted with strong alkali, NH₃ will be released.

SECTION VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

If not contaminated, scoop up for reuse. If contaminated, scoop or vacuum into container for disposal. Avoid dusting.

WASTE DISPOSAL METHOD Dispose of in accordance with Federal, state and local laws.

SECTION VIII -- PROTECTIVE EQUIPMENT

VENTILATION General; local exhaust ventilation as necessary to control dust.

PERSONAL PROTECTIVE EQUIPMENT

Chemical goggles.

Rubber or neoprene gloves

Body protection as necessary to prevent skin contact.

A NIOSH/MSHA approved respirator as necessary

SECTION IX -- SPECIAL PRECAUTIONS

Avoid breathing dust.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Keep container closed.

Keep away from food and feed products.

SECTION X -- PERSONNEL SAMPLING PROCEDURE

Refer to NIOSH Manual of Analytical Methods, Vol. 1, 2nd Edition, 1977, P&CAM #117 for information on monitoring for airborne materials containing fluoride.

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